

SERVER ARRAY HARDWARE ARCHITECTURE AND SYSTEM

ABSTRACT OF THE DISCLOSURE

A midplane board of a high-density server has mounted to it eight processor cards having modified CPCI form factors, multiple hard drive cards and a KMV switch card, all networked together using redundant network control cards through network connections formed from a CPCI J2 bus. Power is supplied to the processor cards by redundant power supply cards through the CPCI J2 bus as well. The processor cards and power supply cards are mounted to the back side of the midplane board while the multiple hard drive cards, the KMV switch card and expansion cards are mounted to the front side of the midplane board. All cards are hot swappable and configured horizontally on the midplane board. Each processor card controls two expansion cards through the CPCI J1 bus passing through the midplane board. The processor card pinout is the mirror image of that of traditional CPCI front side processor cards.